

direct-axis current value to control the voltage provided to the electric motor, wherein the voltage provided to the electric motor controls torque and flux produced by the electric motor.

6. (Original) The method of claim 5 wherein discharging the capacitor comprises calculating the quadrature-axis current value and the direct-axis current value such that the quadrature-axis current value is sufficiently small to produce insufficient torque to drive the wheels.

7. (Original) The method of claim 5 wherein discharging the capacitor comprises calculating the quadrature-axis current value and the direct-axis current value such that the quadrature-axis current value is zero and no torque is produced by the electric motor for any direct-axis current value.

8. (Original) The method of claim ~~8~~⁷ wherein calculating the quadrature-axis current value and the direct-axis current value comprises calculating values to produce positive power flow from the capacitor to the electric motor which is insufficient torque for driving the wheels.

9. (Currently Amended) An automotive electric distribution system for use in an electric vehicle, the system comprising:

- a DC power source to provide DC energy;
- a capacitor coupled to the power source;
- a pair of contactors connected between the DC power source and the capacitor to electrically separate the DC power source from the capacitor if the contactors are open;
- an AC electric motor coupled to the power source and coupled to a pair of wheels to drive the vehicle;
- an electric motor controller coupled between the capacitor and the electric motor to control voltage provided to the electric motor; [[and]]
- a software program to discharge the capacitor by controlling the electric motor controller such that energy can be controllably transferred from the capacitor to the electric